

Figure 1 A

# Process Overview

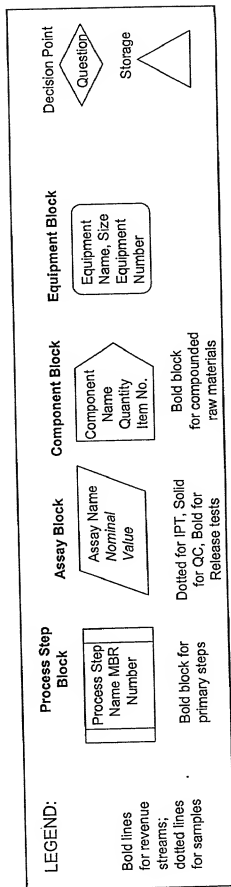
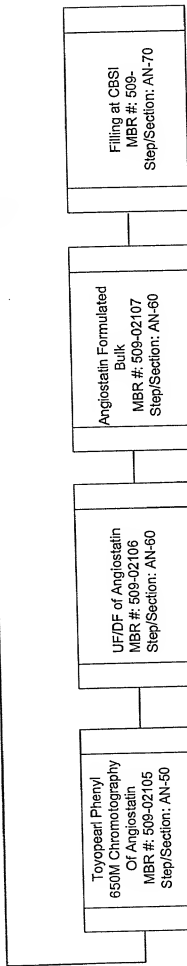
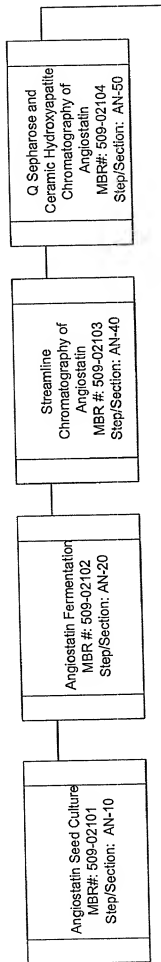
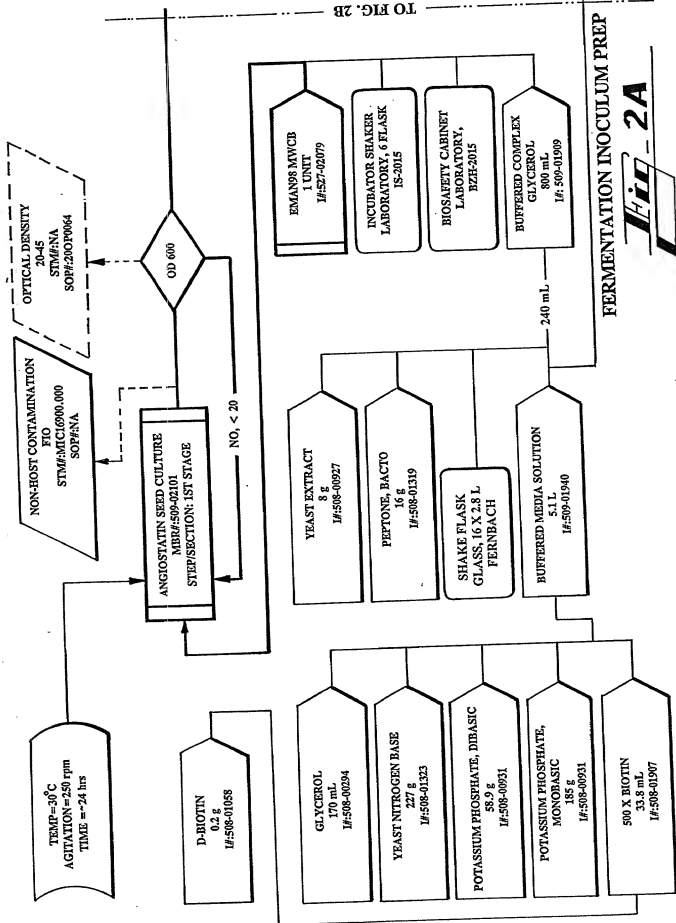
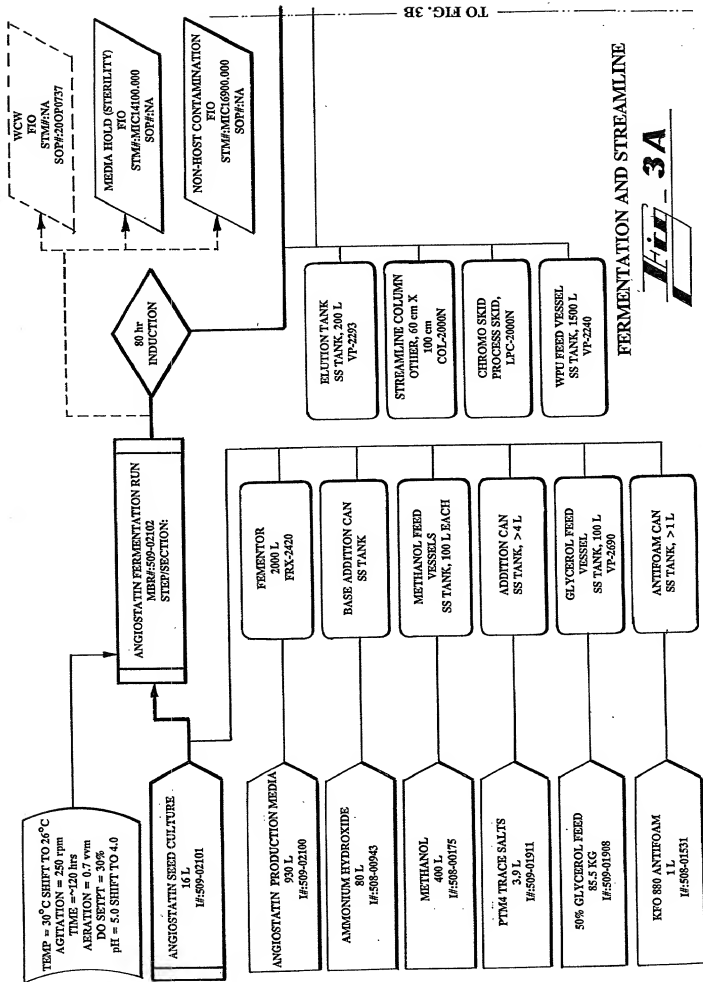


Figure 1B



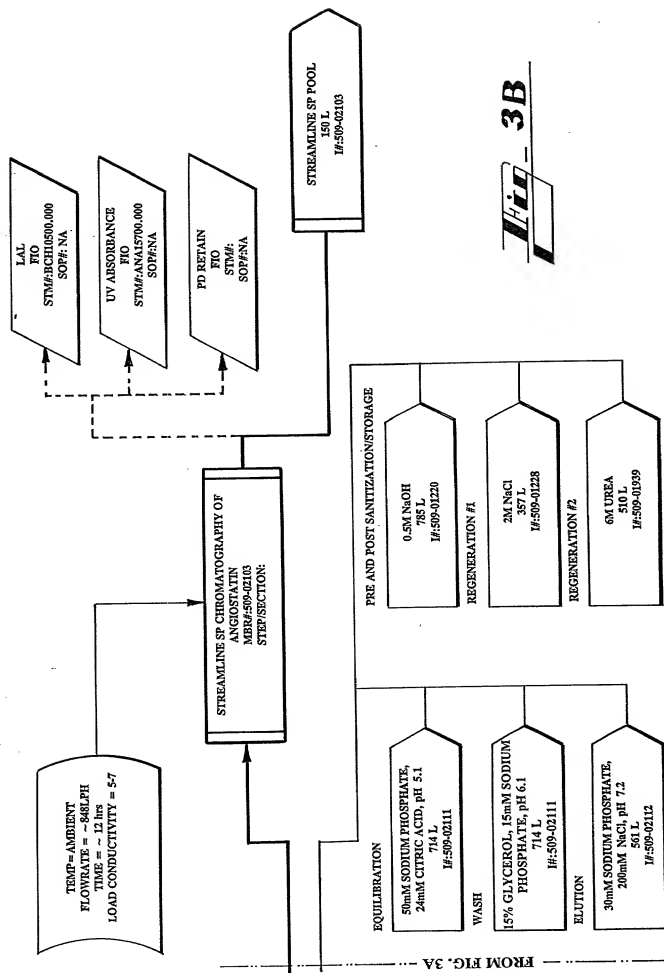




FERMENTATION AND STREAMLINE

3A

TO FIG. 3B



3B

TEMP-AMBIENT  
FLOW RATE ~ 480 LPH  
TIME-8 hrs  
LOAD CONDITION: 1X WITH WFI

STEAMLINE POOL  
150 L  
1#-509-02103

SANITIZATION AND STORAGE

0.5M NaOH  
267 L  
1#-509-01220

0.5M SODIUM PHOSPHATE  
318 L  
1#-509-02113

RINSE/EQUILIBRATION/WASH/ELUTION

10mM SODIUM PHOSPHATE, pH 7.0  
1134 L  
1#-509-02172

ELUTION

74mM SODIUM PHOSPHATE, pH 7.0  
382 L  
1#-509-02174

Q REGENERATION

2M NaCl  
33 L  
1#-509-01228

Q SEPHAROSE AND CERAMIC  
HYDROXYAPATITE  
CHROMATOGRAPHY OF  
ANGIOSTATIN  
MBR#-509-02104  
STEP/SECTION:

UV ABSORBANCE  
FTO  
STM#A15700.000  
SOP#A

UV ABSORBANCE  
FTO  
STM#A15700.000  
SOP#A

HPLC  
FTO  
STM#:  
SOP#A

CHT POOL  
180 L  
1#-509-02104

ELUTION TANK  
SS TANK, > 400 L TOTAL  
VP-1540, VP-1545

BPG-450  
OTHER, 45 cm X 25 cm  
COL-4002N

CHROMO SKID  
PROCESS SKID,  
LPC-5090

TO FIG. 4B

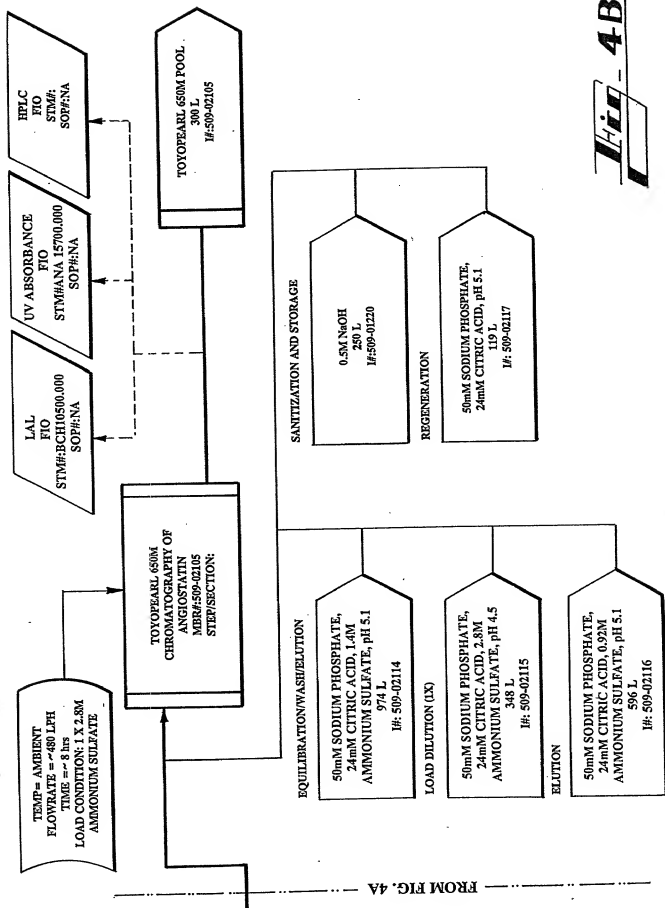
PURIFICATION

ELUTION TANK  
SS TANK, > 400 L TOTAL  
VP-1560, VP-1565

BPG-300  
OTHER, 30 cm X 15 cm  
COL-4025N(QFF)

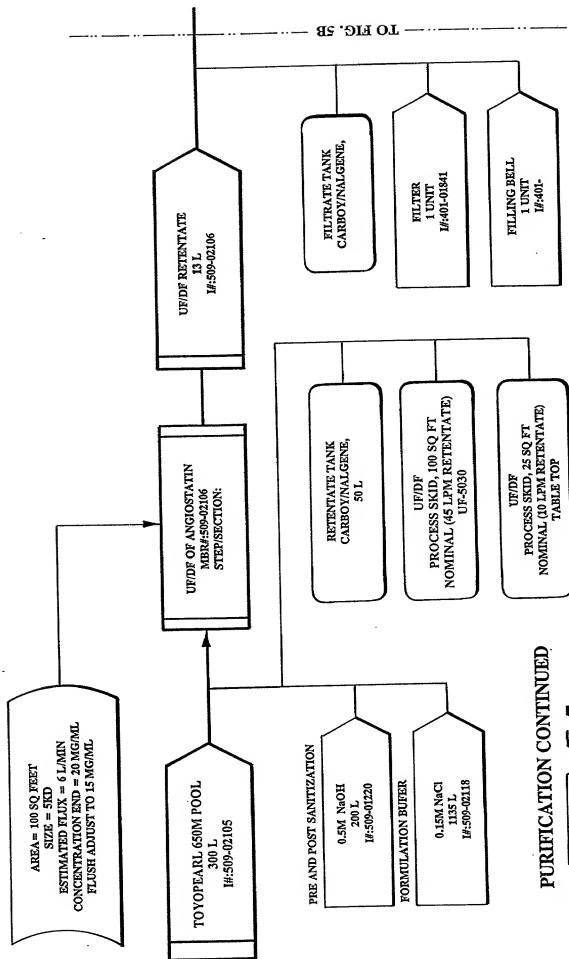
BPG-450  
OTHER, 45 cm X 30 cm  
COL-4002N (CHT)

CHROMO SKID  
PROCESS SKID,  
LPC-5090



FROM FIG. 4A





TO FIG. 5B

PURIFICATION CONTINUED

**Hi-5A**

100101-91528600

